Definitive Technology

# Di SERIES OWNER'S MANUAL

Models: 3.5R, 4.5R, 5.5R, 6.5R, 8R, 6.5STR, 5.5S and 6.5S

*Definitive Technology®*
*The Leader in High-Performance Loudspeakers®*

## Thank You

Thank you for choosing the Definitive Technology Disappearing In-Wall loud speaker. The Di Series products offer extraordinary sound quality from speakers that are barely visible when installed in a wall or ceiling. Our engineers spent many years developing this product. In order to ensure that you experience the finest per formance possible, we encourage you to take a moment to fully read this owner's manual and familiarize yourself with the proper installation and set-up procedures for your Di Series speaker.

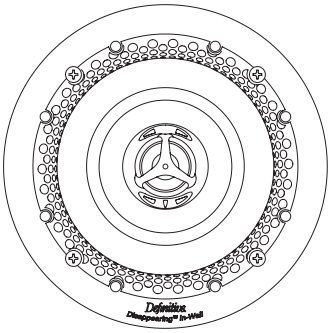
## Unpacking Your Disappearing In-Wall Speakers

### Please Inspect For Shipping Damage

Each loudspeaker leaves our plant in perfect condition. Any visible or concealed damage most likely occurred in handling after it left our plant and should be reported at once to your Definitive dealer or the delivery company that delivered your loud-speaker. Please unpack your system carefully. Save all cartons and packing materials in case you move or need to ship your system. Record the serial number found on the back of the speakers, and on the carton, in this manual and save it for future reference should your speaker need service. For your best protection, register your Di Series products on-line at http://registration.definitivetech.com.

## Di Series

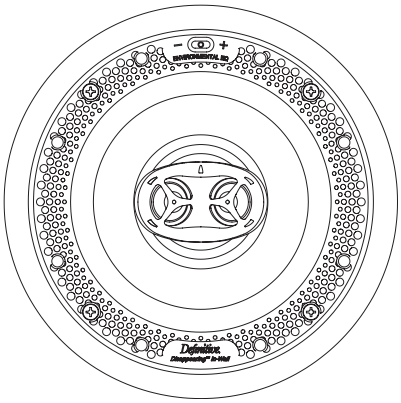
**Di 3.5R**



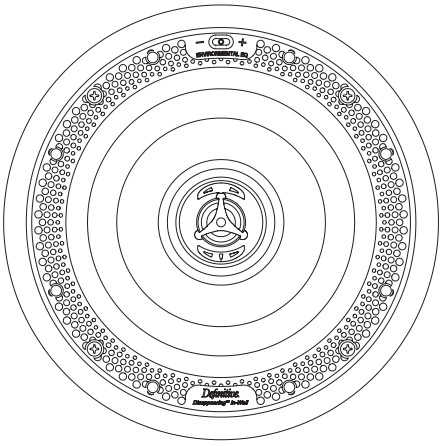
**Di 4.5R**

**Di 5.5R**

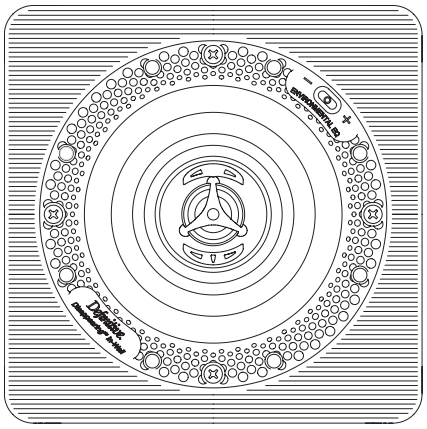
**Di 6.5R**



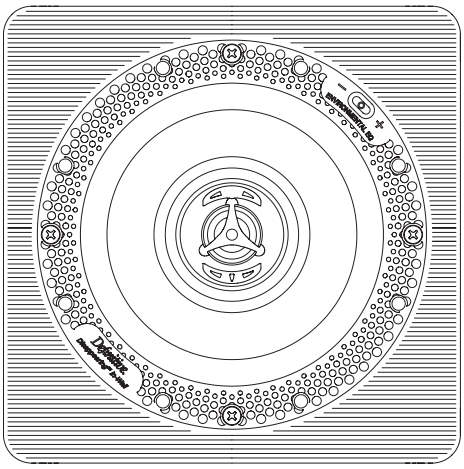
**Di 6.5STR**



**Di 8R**



**Di 5.5S**



**Di 6.5S**

## Painting Di Series Speakers

Your Di Series speakers may be painted to match the color of the wall or ceiling in which they are installed. **Failure to follow the following painting instructions may result in seriously degraded sound quality**. It is your responsibility to make sure your painting contractor sees and follows these instructions.

1. **DO NOT PAINT THE GRILLE WITH A BRUSH OR ROLLER** — they will clog the fine mesh of the grille and cloth scrim and result in poor sound quality.
2. Remove the grille from the speaker and place it on a drop cloth, newspaper or plastic sheet.
3. The grille MUST be spray painted with one of the following:
   - Spray paint that closely matches the desired finish/color
   - A custom spray bomb, color matched to your paint finish
   - Indoor latex paint using a spray gun (paint must be diluted to the paint manufacturer's specifications)
4. Removing the backing cloth (scrim) is not required.
5. Paint should be applied in a series of thin coats sprayed at approximately 60 degrees from the grille surface, allowing each coat to fully cure before applying additional coats.
6. To ensure that the paint distribution is evenly applied, each coat should be applied from at least 4 different directions to the grille. (N, S, E & W) This will ensure an even coverage on the grille.
7. Once the grille has been painted and the paint has fully cured, you may use a brush, or small roller to touch-up the outer edge of the grille frame — being VERY careful not to get any additional paint on the grille mesh surface.

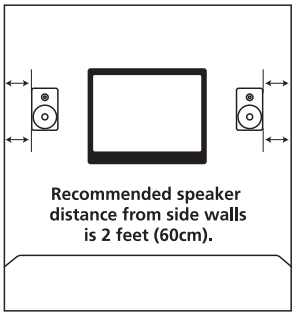



**Figure 1**

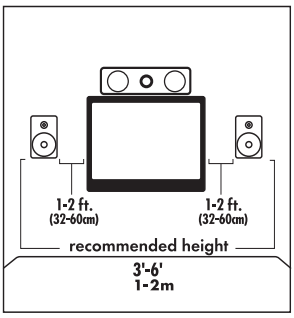



**Figure 2**

## Optional Fire-Rated Enclosures

Definitive Di Series speakers have been designed to meet UL 1480 and 2043 standards when used with the appropriate optional Definitive fire-rated enclosures. All plastic parts used in the speakers are V0 flame rated as per UL 94.

While these enclosures are necessary in most countries for commercial and multi-family dwelling installations, residential customers may want to use them for added safety and/or to reduce the sound from "leaking" into adjacent rooms.

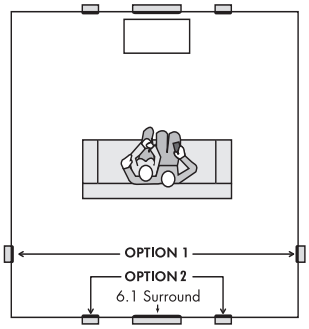



**Figure 3**

## Placement Options

Definitive Technology Di Series Loudspeakers give you nearly endless placement options. But remember that placement choice for your in-wall speakers bears careful consideration, as installation requires that you cut a hole in your wall or ceiling! Fill a room with sound by installing in-wall speakers in nearly any wall or ceiling location although it is best to keep the speakers at least 2 feet (60 cm) from side walls [*Figure 1*]. When using Di Series models in home theater applications follow the guidelines [illustrated in *Figures 2, 3* and *4*]. Definitive Di Series In-Wall Loudspeakers have aimable tweeters that allow you to focus their sound toward or away from your listening area depending on the application.

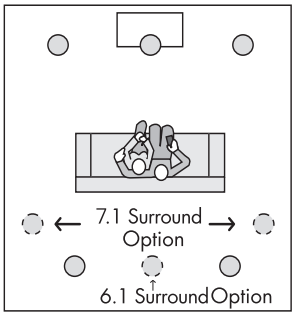



**Figure 4**

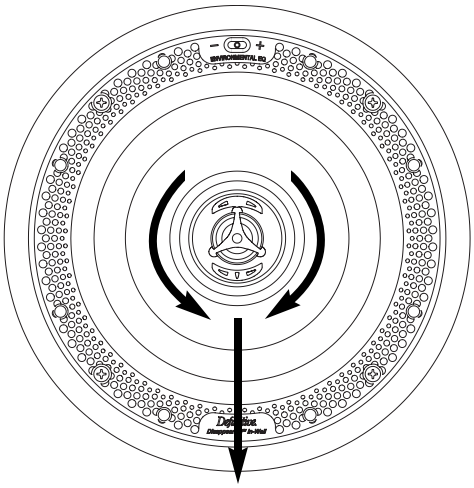


**Figure 5**

Point tweeter in desired direction by turning the tweeter assembly.

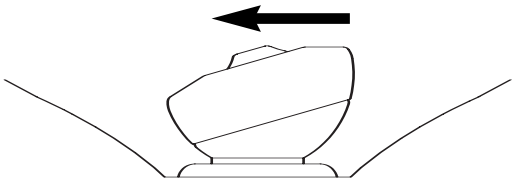


**Figure 6a**

Push gently in direction of arrow to set angle.

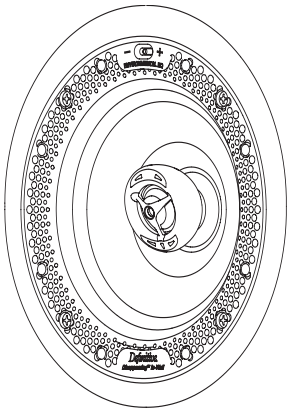


**Figure 6b**

## Aiming the Tweeter

A tweeter aimed toward your listening position improves imaging and detail. To aim the tweeter, first install the speaker in the desired location. Rotate the tweeter so that the arrow on the tweeter faceplate is pointing in the direction you wish to aim the tweeter [*Figure 5*] then gently push the tweeter in that direction [*Figure 6*]. When using Di Series In-Wall Loudspeakers as front/main home theater speakers or as stereo speakers in a distributed audio system aim the tweeter toward the main listening position. For rear/surround speakers installed in walls or ceilings, aim the tweeter toward the nearest reflecting surface (an adjacent wall or ceiling) for a more diffuse sound field (if you so desire; for more direct sound, aim the tweeters at your listening position).

## Environmental EQ
(not included on Di 3.5R and Di 4.5R models)

If your listening room is very reflective, with smooth sheetrock walls, hardwood floors, and non-cushioned furniture, the sound will be overly "bright" and unnatural. Engaging the Environmental EQ feature [*Figure 7*] (by selecting the "–" setting) compensates for the effect of overly loud treble. If your room is has a lot of absorbing surfaces such as over-stuffed furniture, heavy drapes and rugs such that the speakers sound "dull," engage the "+" setting to boost treble response. Leave the switch in the center position in rooms with a balance of reflecting and absorbing surfaces (most rooms fall into this category). Note: the Di 6.5STR has a two position switch; the minus symbol "-" represents normal treble output and the plus symbol "+" represents treble boost.

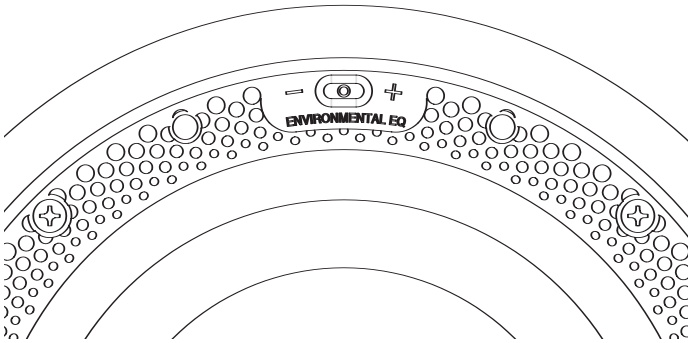



**Figure 7**

## Installation

### Installation Cautions

Installation of Disappearing Series Loudspeakers requires skills in using tools such as a drill, screwdriver, saws and power tools. Installation also entails running wires through walls. You should have a thorough understanding of local building and fire codes and a familiarity with the area behind the wall or ceiling into which you plan to install your speakers.

When cutting holes in and running wires through walls/ceilings you run the risk of cutting electrical wires or water pipes thereby causing safety hazards and property damage. If you are in any doubt that you possess the necessary skills or tools, contact your Definitive Technology dealer, general contractor or a professional installer.

### Required Tools

- Pencil for marking the location of installation.
- Bubble level (for Di 5.5S and Di 6.5S models only)
- Keyhole saw, utility knife or material- appropriate incising implement for cutting drywall or other wall material.
- Phillips head screwdriver.
- Power drill with appropriate bit (optional, for starting wall cut).

### Installation Procedure

- You must first install speaker wires that meet appropriate building and fire codes before installing the speakers. Use at least 18 gauge wire or heavier to ensure optimum sound quality.

- Make sure the material into which you plan to mount the speakers (plaster, drywall, paneling, stone, etc.) can support the weight of the speakers (see specification page for the weight of your model).
- Make sure the locations you select do not conceal studs, electrical wiring or plumbing. Prior to installation, hold the speaker with grille on in your chosen location to make sure it safely clears obstacles such as studs, corners, beams, lighting fixtures and door/window frames. Your cutout must be at least 2" (50 mm) from adjoining walls or ceiling, internal studs or plumbing.

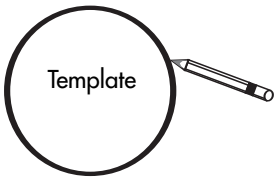



**Figure 8**

- Using the supplied template, trace the installation location with a pencil. You can do this by holding the template in your preferred location and tracing around it. In the case of the rectangular models (Di 5.5S and Di 6.5S) use a bubble level to square and level the template. [*Figures 8 & 9*]

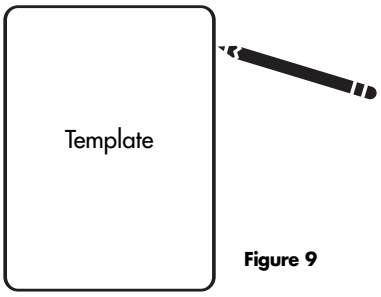



**Figure 9**

- Carefully cut the hole with the appropriate cutting tool for your wall or ceiling material. Start the hole by drilling a hole on the inside of the tracing (with the drill bit just inside the line). Use this hole to insert the saw or knife and begin cutting [*Figure 10*]. The holes for the Di 3.5R and Di4.5R must be cut very precisely as their flanges are only 3/8" (9.5 mm) wide. We recommend using hole saws to cut the holes for these models — 3 3/4" for the Di 3.5R and a 4 1/2" for the Di 4.5R.

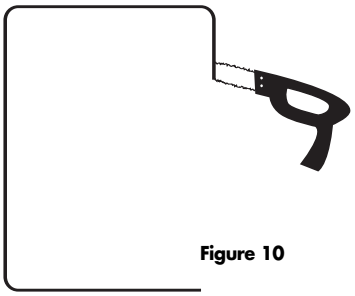


**Figure 10**

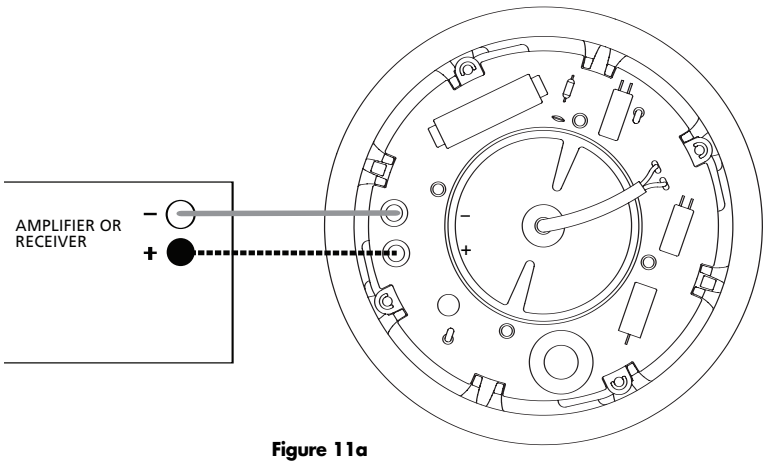



**Figure 11a**

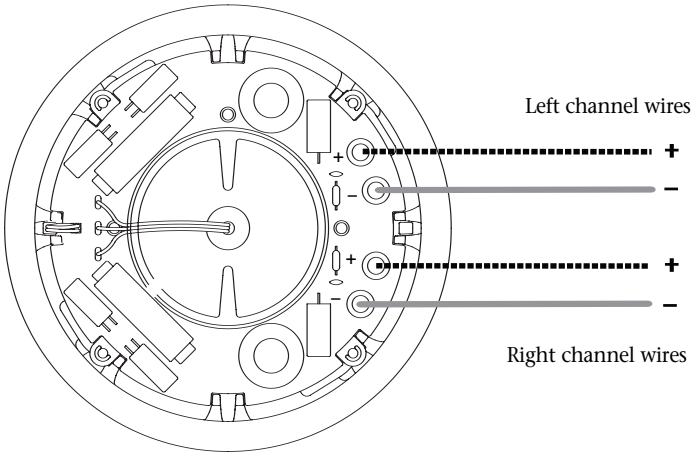



**Figure 11b**

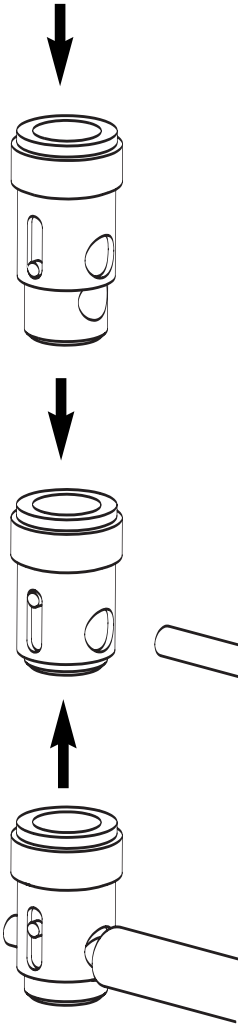


**Figure 12**

- Once you have cut the hole, pull the speaker wire out of the hole and connect the speaker. Strip 1/2" inch (12 mm) of insulation from each of the two conductors of the wire to expose the bare metal and twist each of the conductors into a single unfrayed strand. Note that one of the terminals on the rear of each speaker is marked red (+) and the other black (-). Make certain that you connect the wire from the red terminal (+) of your amplifier or receiver to the red terminal (+) on your speaker and the wire from the black terminal (-) of your amplifier or receiver to the black terminal (-) on your speaker. Most wire has some indicator (such as color-coding, ribbing or writing) on one of the two conductors to help you maintain consistency [*Figure 11a*]. In the case of the Di 6.5STR single speaker stereo model, both left and right channel speaker wires are connected to the speaker [*Figure 11b*].
- Push down on the top of the terminal to reveal the wire hole in the side of the terminal post and insert the wire into the hole [*Figure 12*]. Release the pressure on the terminal to secure the wire.
- Loosen the rotating lock arms by turning the lock arm screws on the front of the speaker counter clockwise ½ to 1 turn, just enough to allow the lock arm to move freely. [*Figure 13*]. Make sure that the rotating lock arms are flipped inwards [*Figure 14*] so that your speaker fits into your cutout.

- Place the speaker carefully into the cutout. If you have a level, use it to help you correctly align rectangular speaker models. Tighten the lock arm screws with a screwdriver [*Figure 15*]. This will rotate the lock arms [*Figure 16*] and secure the speaker to the wall/ceiling. Do not over-tighten the lock arm screws. If you are using a powered screwdriver or drill set the torque to a value of 7 in. – lb. (8dN – m)
- Install the grille on the speaker frame. Powerful magnets hold the grille in place.

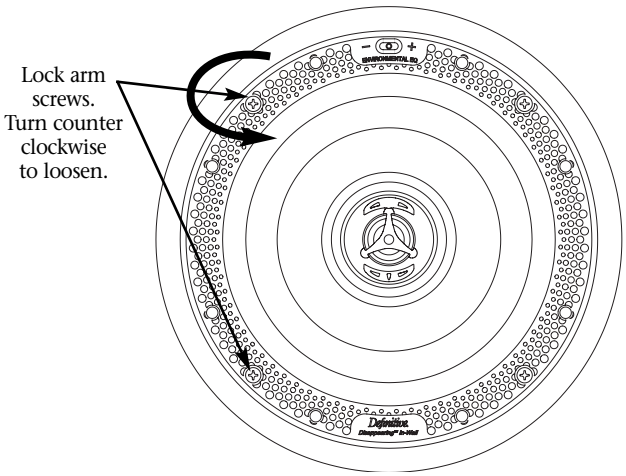



**Figure 13**

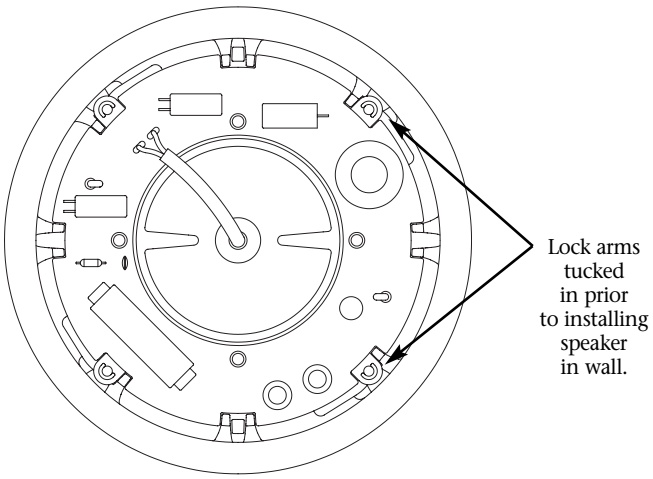



**Figure 14**

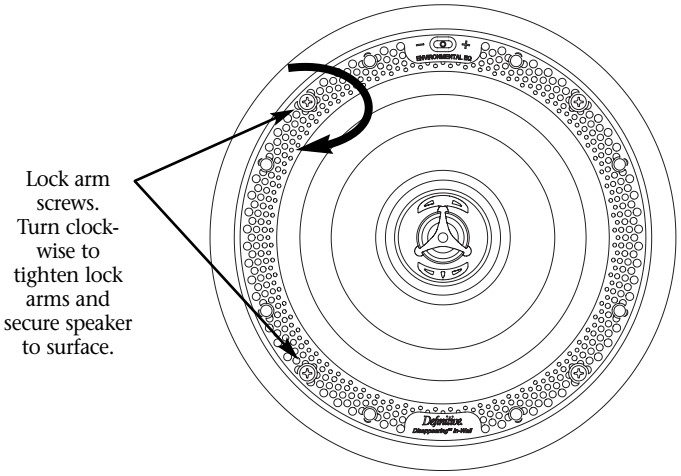



**Figure 15**

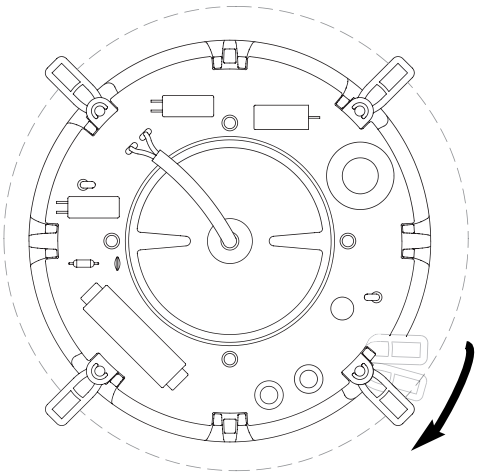


**Figure 16**

## SAFETY FIRST

When installing your Di Series In-Wall Loudspeakers, be aware of the weight of your particular model (see specification page for the weight of your model) and the sturdiness of the material into which you are installing the speaker. Also be aware of any concealed studs, electrical wiring or plumbing in the wall or ceiling into which you are installing the speakers. If you are not sure of a safe way to install these speakers, consult a professional installer, your authorized Definitive Technology dealer, or a building contractor.

### Technical Assistance

It is our pleasure to offer assistance if you have any questions regarding your Definitive loudspeakers. Please contact your nearest Definitive Technology dealer or call us directly at (800) 228-7148 (US & Canada), 01 (410) 363-7148 (all other countries) or e-mail info@definitivetech.com.

### Service

Service work on your Definitive loudspeakers will normally be performed by your local Definitive Technology dealer. If your dealer is unable or unwilling to perform service contact us for alternative options. Please note that the address given in this manual is the address of our offices only. **Under no circumstances should loudspeakers be shipped to our offices or returned without contacting us first and obtaining return authorization.**

Definitive Technology Offices
11433 Cronridge Drive
Owings Mills, Maryland 21117
Phone: (800) 228-7148 (US & Canada),
01 (410) 363-7148 (all other countries)

## WARNING: LISTEN CAREFULLY

Definitive Technology loudspeakers and subwoofers are capable of playing at extremely high volume levels, which could cause serious or permanent hearing damage. Definitive Technology accepts no liability for hearing loss, bodily injury or property damage resulting from the misuse of its products.

You should limit prolonged exposure to volumes that exceed 85 decibels (dB).

For more about safe volume levels refer to the Occupational Health and Safety Administration (OSHA) guidelines at: www.osha.gov/dts/osta/otm/noise/standards_more.html.

## NOTES

## Specifications

| | Di 3.5R | Di 4.5R | Di 5.5R | Di 6.5R | Di 6.5STR | Di 8R | Di 5.5S | Di 6.5S |
|---|---|---|---|---|---|---|---|---|
| Grille Diameter | 4-9/16" (11.6 cm) | 5-3/8" (13.55 cm) | 7-3/8" (18.62 cm) | 8-5/16" (21.04 cm) | 8-5/16" (21.04 cm) | 9-3/4" (24.76 cm) | — | — |
| Grille Length | — | — | — | — | — | — | 7-3/8" (18.61 cm) | 8-5/16" (21.01 cm) |
| Grille Width | — | — | — | — | — | — | 7-3/8" (18.61 cm) | 8-5/16" (21.01 cm) |
| Cutout Diameter | 3-3/4" (9.55 cm) | 4-1/2" (11.5 cm) | 6-5/16" (16 cm) | 7-1/4" (18.4 cm) | 7-1/4" (18.4 cm) | 8-3/4" (22.2 cm) | — | — |
| Cutout Width | — | — | — | — | — | — | 6-5/16" (16 cm) | 7-1/4" (18.4 cm) |
| Cutout Length | — | — | — | — | — | — | 6-5/16" (16 cm) | 7-1/4" (18.4 cm) |
| Total Depth * | 3" (7.55 cm) | 3-3/8" (8.64 cm) | 3-5/8" (9.04 cm) | 3-5/8" (9.07cm) | 3-5/8" (9.07 cm) | 3-7/8" (9.77 cm) | 3-5/8" (9.04 cm) | 3-7/8" (9.70 cm) |
| Mounting Depth In-Wall ** | 2-1/2" (6.3 cm) | 2-7/8" (7.4 cm) | 3-1/16" (7.8 cm) | 3-1/16" (7.8 cm) | 3-1/16" (7.8 cm) | 3-3/8" (8.5 cm) | 3-1/16" (7.8 cm) | 3-1/16" (7.8 cm) |
| Woofer | 3-1/2" (8.9 cm) | 4-1/2" (11.4 cm) | 5-1/4" (13.3 cm) | 6-1/2" (16.5 cm) | 6-1/2" (16.5 cm) | 8" (20 cm) | 5-1/4" (13.3 cm) | 6-1/2" (16.5 cm) |
| Tweeter | 3/4" (20 mm) | 3/4" (20 mm) | 1" (25 mm) | 1" (25 mm) | 2 @ 3/4" (20 mm) | 1" (25 mm) | 1" (25 mm) | 1" (25 mm) |
| Product Weight | 1.9 lb. (0.85 kg) | 2.6 lb. (1.16 kg) | 3.7 lb. (1.67 kg) | 3.8 lb. (1.73 kg) | 4.4 lb. (2.14 kg) | 4.8 lb. (2.14 kg) | 3.8 lb. (1.73 kg) | 4 lb. (1.79 kg) |
| Frequency Response | 40 Hz – 30 kHz | 35 Hz – 30 kHz | 28 Hz – 30 kHz | 26 Hz – 30 kHz | 26 Hz – 30 kHz | 26 Hz – 30 kHz | 28 Hz – 30 kHz | 26 Hz – 30 kHz |
| Sensitivity | 87 dB | 88 dB | 89 dB | 90 dB | 90 dB | 90 dB | 89 dB | 90 dB |
| Impedance | All models are compatible with 4 – 8 Ohm outputs. | | | | | | | |
| Min/Max Recommended Power | 10/125 | 10/150 | 10/175 | 10/200 | 10/125 | 10/225 | 10/175 | 10/200 |

* From back of mounting flange to deepest part of product

** Total depth when product installed in 1/2" (12.7mm) thick material

## Limited USA Warranty: 5-Years for Drivers and Cabinets

Definitive Technology warrants to the original retail purchaser only that this Definitive Technology Loudspeaker Product (the "Product") will be free from defects in materials and workmanship for a period of five (5) years from the date of the original purchase from a Definitive Technology Franchised Dealer. However, this warranty will automatically terminate prior to the expiration of five (5) years if the original retail purchaser sells or otherwise transfers the Product to any other party. The original retail purchaser shall hereinafter be referred to as "you." To obtain the warranty protection for your Definitive Technology Product(s), you must fill out the Warranty Registration Card(s), within ten days of the date of purchase.

Defective Products must be shipped, together with proof of date of purchase, prepaid insured to the Franchised Dealer from whom you purchased the Product, or to the nearest Factory service center. Product(s) must be shipped in the original shipping container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If, upon examination at the Factory or a Definitive Technology Franchised Dealer it is determined that the unit was defective in materials or workmanship at any time during this Warranty period, Definitive Technology or the Definitive Technology Franchised Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. All replaced parts and Product(s) become the property of Definitive Technology. Product(s) replaced or repaired under this Warranty will be returned to you, within a reasonable time, freight collect.

This Warranty does not include service or parts to repair damage caused by accident, misuse, abuse, negligence, improper mounting, inadequate packing or shipping procedures, commercial use, voltage in excess of the rated maximum of the unit, normal wear and tear, cosmetic appearance of cabinetry or components not directly attributable to defects in materials or workmanship, or service, or repair or modification of the Product which has not been authorized by Definitive Technology.

*Definitive Technology makes no Warranty with respect to its Products purchased from dealers or outlets other than Definitive Technology Franchised Dealers.*

*This Warranty is in lieu of all other expressed Warranties. If this Product is defective in material or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Definitive Technology be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if Definitive Technology or a Definitive Technology Franchised Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation may not apply to you.*

*All implied warranties on the Product are limited to the duration of this expressed Warranty. Some states do not allow limitation on how long an implied Warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you also may have other rights which vary from state to state.*

CE

This product complies with the essential requirements
of the EMC directive 89/336/EEC.



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